

Work Order ID 109547***109547***

Page 1

November-21-13 2:34:22 PM

Item ID: D4148-041

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Fwd X-Tube Lug Ass'Y

Start Date: 11/21/13 Start Qty: 5.00

5

Cust Item ID:

Required Date: 11/21/13 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: MLJDate: 13-11-22 Tooling:

Date:

Run

Start

NR1

QC: _____

Date: _____ SPC (Y/N):

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D4148	E
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100	0.00
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100	0.00
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Small Fab	Memo
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Small Fab	1- Assemble as per dwg
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110	QC5- Inspect part completeness to step on W/O	0.00
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110	0.00
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QC	Memo
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Quality Control	13-12-10
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DAS

27

9-89

13/12/10

120	Identify as per dwg & Stock Location: <u>ST460</u>	0.00
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120	0.00
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Packaging	Memo
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Packaging	13-12-11
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DAS

28

9-89

DAS
36
9-89

13/12/10

DQA: _____ Date: _____

Date:

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Date:

Work Order update only

Work Order ID 109547

109547

Page 2

November-21-13 2:34:22 PM

Item ID:	D4148-041	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:				Stop		*NS2*	
Item Name:	Fwd X-Tube Lug Ass'Y						
Start Date:	11/21/13	Start Qty:	5.00	*5*	Cust Item ID:		
Required Date:	11/21/13	Req'd Qty:	5.00	*5*	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC	QC21- Final Inspection - Work Order Release	0.00							<i>PLB-12-16</i>
	Memo	0.00							<i>(L13/211)</i>

Quality Control

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>		
NCR No. _____	Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>		
	Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>		
	Suspected Unapproved <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function				<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other			
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DQA:

Date:

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

Work Order update only

Work Order: _____

DISPOSITION

AGAINST DEPARTMENT/PROCESS

Rework Skid-tube Water Jet Engineering Scrap Machining Prod. Eng. Coor. Quality Use-as-is Thermoforming Rec/Store/Packaging Other Suspected Unapproved Large Fab Supplier

NCR No. _____

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending <input type="checkbox"/>	General <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
	Centre Not Concentric <input type="checkbox"/>	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
	Cracks <input type="checkbox"/>	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
	Crimp/Kink/Ripple/Wave <input type="checkbox"/>	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
	Cuffs <input type="checkbox"/>	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
	Crushing <input type="checkbox"/>	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
	Heat Treat <input type="checkbox"/>	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>
	Inspection Strip in Tube <input type="checkbox"/>	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
	Marks/Chatter <input type="checkbox"/>	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
	Turning Sequence <input type="checkbox"/>	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
	Wave/Twist in Tube <input type="checkbox"/>	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

Picklist Print

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Page 2

Work Order ID:	109547	Start Date:	11/21/13	Required Date:	11/21/13
Parent Item:	D4148-041				
Parent Item Name:	Fwd X-Tube Lug Ass'Y		Start Qty:	5.00	Required Qty: 5.00
D391041 CrossTube Lug	Manufactured	No	100	Each	25.0000
					1 <i>\$4</i> <i>13/12/05</i>
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
			ST464	25	
			106717	22	
			81474	2	
			89772	1	
D4091-1 Mounting Lug	Manufactured	No	100	Each	15.0000
			1 <i>\$4</i> <i>13/12/05</i>		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
			ST144	15	
			107990	15	
D4148-0 CrossTube Lug Plate, Fwd	Manufactured	No	100	Each	11.0000
			2 <i>\$4</i> <i>13/12/05</i>		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
			ST144	9	
			106002	9	
			ST145	2	
			85753	2	
D4148-3 Stud Receiver, Lower	Manufactured	No	100	Each	6.0000
			1 <i>\$4</i> <i>13/12/05</i>		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
			ST144	6	
			108524	6	
D4148-5 Eyebolt Stud	Manufactured	No	100	Each	25.0000
			1 <i>\$4</i> <i>13/12/05</i>		
			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
			ST145	25	
			105616	25	
XAN3C12A Bolt	Purchased	No	100	Each	0.0000
			2 <i>\$4</i> <i>13/12/05</i>		
			<i>M127745 82</i>		

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. _____	Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. _____							

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other

Picklist Print

Page 3

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Work Order ID: 109547

Parent Item: D4148-041

Parent Item Name: Fwd X-Tube Lug Ass'Y

Start Date: 11/21/13

Required Date: 11/21/13

Start Qty: 5.00

Required Qty: 5.00

AN4C13A
BOLT

Purchased No 100 Each 172.0000 3

12 13/12/05 36 DAS 9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST356	118	
123900	3	
m125978	100	
m126193	15	
ST514	52	
124805	52	
ST516	2	
124215	2	

MSI7984-C413
Quick Release Pin

Purchased No 100 Each 40.0000 1

1 13/12/05 36 DAS 9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST332	33	
118612	2	
m125927	1	
m126872	30	
ST334	7	
m126333	7	

MS20615-4M182
Rivet

Purchased No 100 Each 154.0000 8

4 13/12/05 36 DAS 9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST312	154	
125162	97	
125654	57	

DQA:

Date:

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
 Scrap
 Use-as-is
 Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
 Machining
 Thermoforming
 Large Fab

Crosstube
 Small Fab
 Finishing
 Composite

Water Jet
 Prod. Eng. Coor.
 Rec/Store/Packaging
 Supplier

Engineering
 Quality
 Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design					○				
Doc/Data					○				
Equip/Tooling					○				
Handling/Pre					○				
Material					○				
Operator					○				
Offset/Setup					○				
Process					○				
Supplier					○				
Training					○				
Transport					○				
Unapproved					○				

FAULT CATEGORY

Landing Gear	Bending Centre Not Concentric Cracks Crimp/Kink/Ripple/Wave Cuffs Crushing Heat Treat Inspection Strip in Tube Marks/Chatter Turning Sequence Wave/Twist in Tube	General Bend BOM/Route Broken/Damage/Defect Burrs Contamination Countersink Cut Too Short Drawing Drill Holes Finish Fit/Function	Folio/Program Grain Hardware Inspection Incomplete/Unqualified Instructions Incomplete/Unclear Misaligned/off center Mislabeled Misread Off-set Out of Calibration Out of Sequence	Outside Dimensions Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Set-up Temperature/Cure Weld Wrong Stock Pulled Other
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Picklist Print

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Page 4

Work Order ID: 109547

Parent Item: D4148-041

Parent Item Name: Fwd X-Tube Lug Ass'Y

Start Date: 11/21/13

Required Date: 11/21/13

Start Qty: 5.00

Required Qty: 5.00

NAS149G0332R
WASHER

Purchased No

100 Each 12,205.000

4

25 16

13/12/05

DAS
36
9-89

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
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FP001	254	
123355	254	
ST292	119	
123248	18	
123759	10	
125268	91	

st510	10130	
m126319	4630	
m127306	2500	
m127410	3000	

ST511	1576	
125654	1576	
ST517	126	
124580	126	

Purchased No	100 Each	6,022.0000
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6

25 26

13/12/05

DAS
36
9-89

NAS149G0432R
WASHER

Purchased No

100 Each 6,022.0000

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
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ST292	2286	
119124	6	
121255	8	
121825	8	
122441	55	
m125807	2217	
ST510a	3736	
m126221	3736	

DQA:

Date:



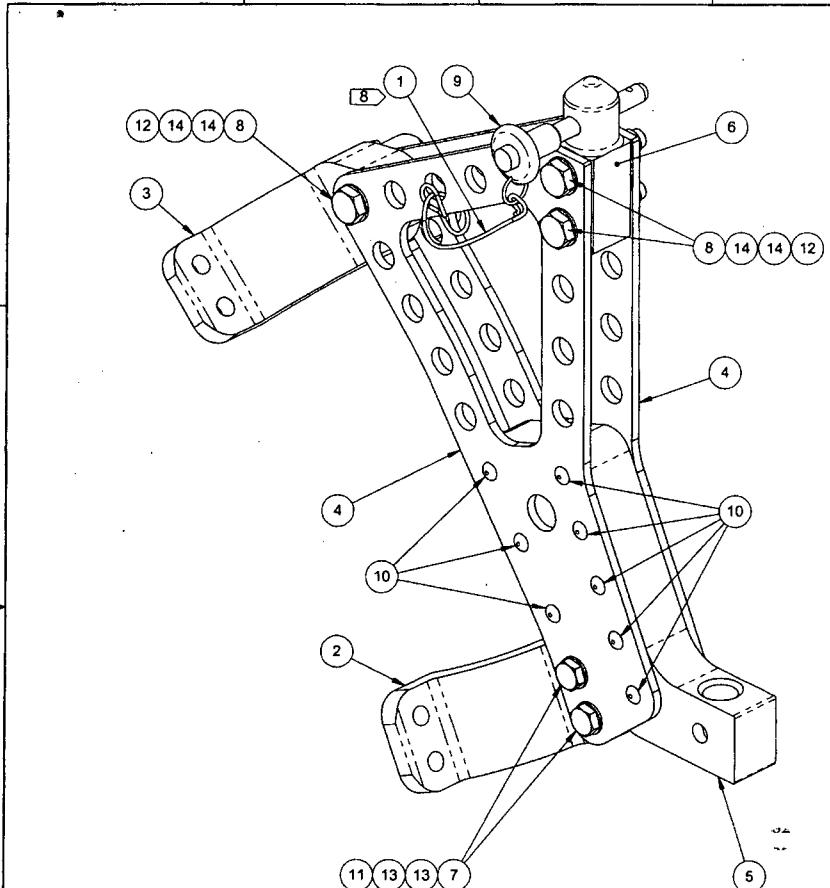
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order:	DISPOSITION				AGAINST DEPARTMENT/PROCESS					
Part No.	Rework	Skid-tube	Crosstube	Water Jet	Engineering					
NCR No.	Scrap	Machining	Small Fab	Prod. Eng. Coor.	Quality					
	Use-as-is	Thermoforming	Finishing	Rec/Store/Packaging	Other					
	Suspected Unapproved	Large Fab	Composite	Supplier						
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Design										
Doc/Data										
Equip/Tooling										
Handling/Pre										
Material										
Operator										
Offset/Setup										
Process										
Supplier										
Training										
Transport										
Unapproved										
FAULT CATEGORY										
Landing Gear	Bending	General	Bend	Folio/Program	Outside Dimensions	Pressure/Forced				
	Centre Not Concentric		BOM/Route	Grain	Over/Under tolerance	Set-up				
	Cracks		Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure				
	Crimp/Kink/Ripple/Wave		Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld				
	Cuffs		Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled				
	Crushing		Countersink	Misaligned/off center	Positioned Wrong					
	Heat Treat		Cut Too Short	Mislabeled	Power Loss/Surge	Other				
	Inspection Strip in Tube		Drawing	Misread						
	Marks/Chatter		Drill Holes	Off-set						
	Turning Sequence		Finish	Out of Calibration						
	Wave/Twist in Tube		Fit/Function	Out of Sequence						



D4148-041 FWD X-TUBE LUG ASSY

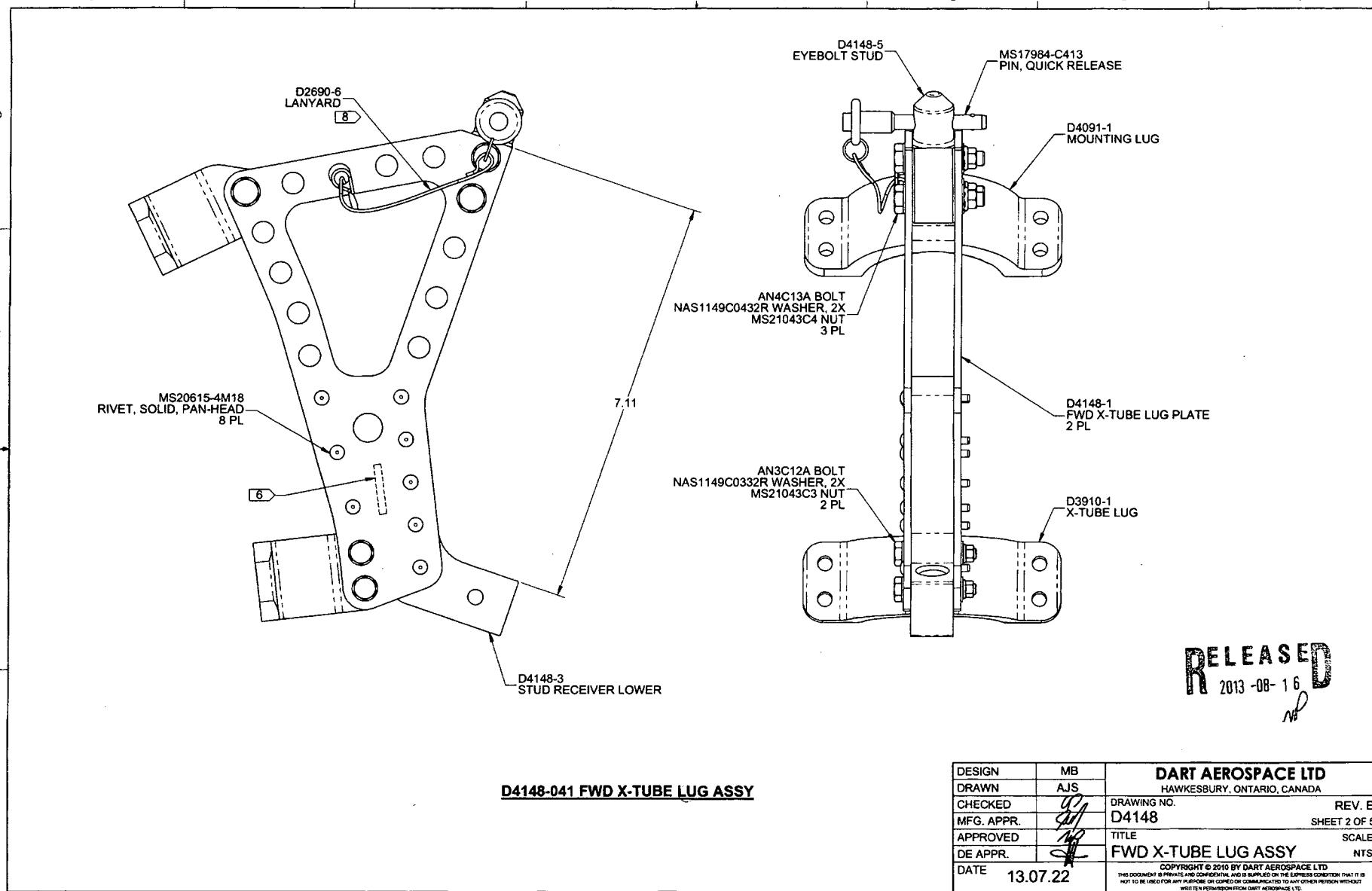
- A
NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4148-041" PER DART QSI 044 6.1
 7) WEIGHT: 3.66 lbs
 8) ATTACH D2690-6 TO D4148-1 BY LOOPING AROUND A LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413

ITEM	QTY	P/N	DESCRIPTION
X	1	D4148-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	1	D3910-1	X-TUBE LUG
3	1	D4091-1	MOUNTING LUG
4	2	D4148-1	FWD X-TUBE LUG PLATE
5	1	D4148-3	STUD RECEIVER LOWER
6	1	D4148-5	EYEBOLT STUD
7	2	AN3C12A	BOLT
8	3	AN4C13A	BOLT
9	1	MS17984-C413	PIN, QUICK RELEASE
10	8	MS20615-4M18	RIVET, SOLID, PAN-HEAD
11	2	MS21043C3	NUT, SELF-LOCKING
12	3	MS21043C4	NUT, SELF-LOCKING
13	4	NAS1149C0332R	WASHER
14	6	NAS1149C0432R	WASHER

109517 MJS
13-11-22

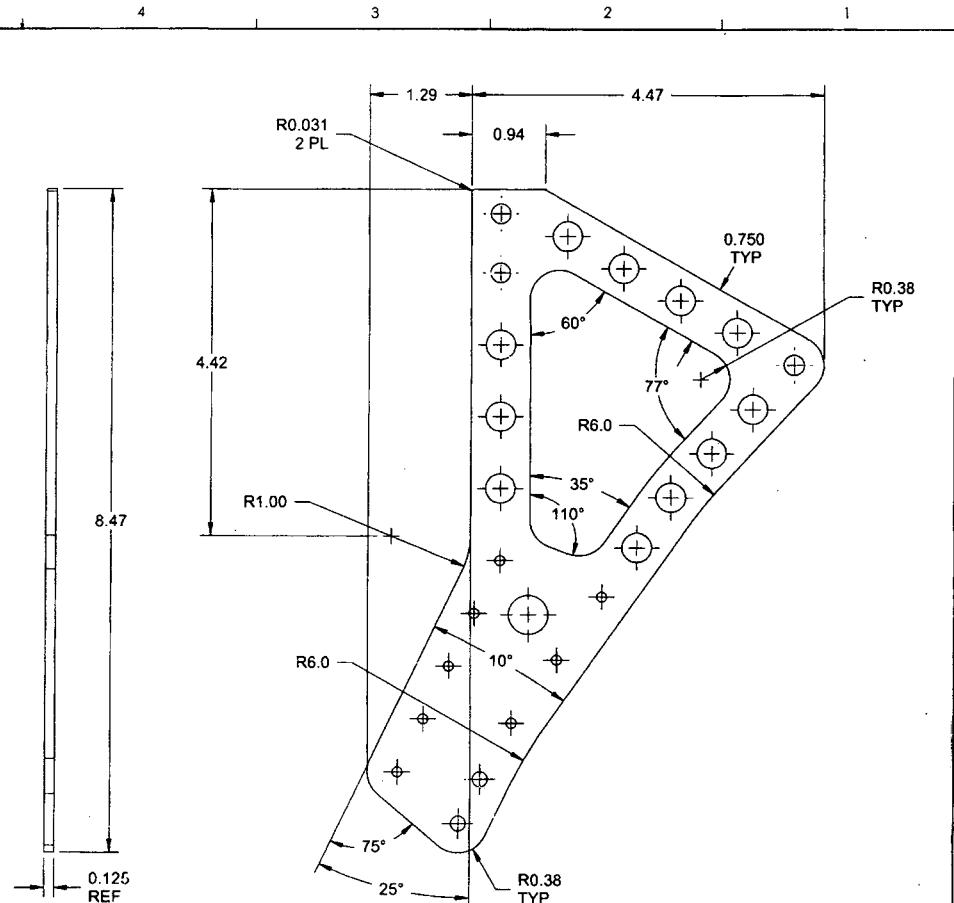
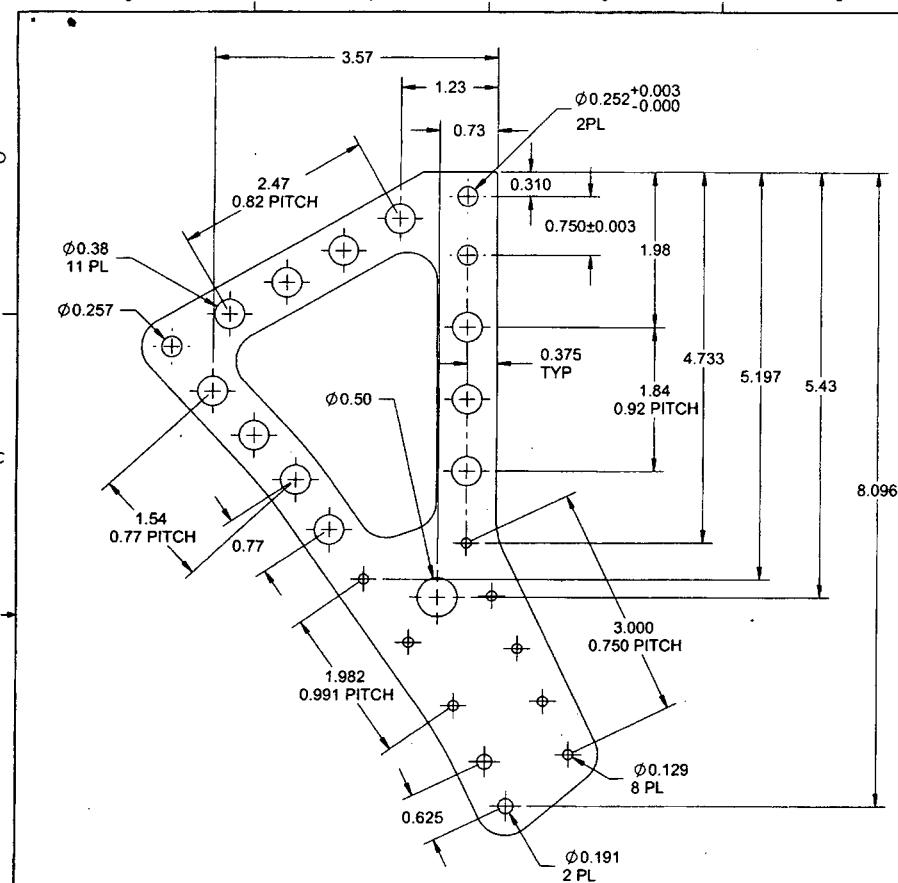
RELEASED
2013-08-16

E	B6-4 Ø 0.266 HOLE ADDED FOR CARGO TUBE INSTALLATIONS.	AJS	13.07.22
D	HOLE DIA CHANGED TO 0.252" (D6-3); HOLE DIA CHANGED TO 0.250" (C8-5). REPLACED QTY(2) AN3C12A, AN4C13A, AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C3 AND QTY(4) NAS1149C0432R (D3-1,C4-2).	SC	11.02.22
C	REDESIGNED D4148-1/3 TO ADDRESS COMPATIBILITY ISSUES WITH D350-591 SHORT STEPS	MB	10.10.12
B	REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH ANGLED RIVET, SOLID, PAN-HEAD, MS20615-4M18 WAS WASHER (2N D3-1, B7-2 & B7-4). MS20615-4M18 WAS MS20615-4M20 (2N D3-1 & B7-2), Ø 0.191 2 PL REPLACES Ø 0.129 3 PL (2N D6-3), Ø 0.129 7 PL WAS 10 PL (ZN A7-3); Ø 0.191 WAS 0.129 (ZN C8-5). REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	REV. E	
MFG. APPR.	<i>[Signature]</i>	D4148	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD X-TUBE LUG ASSY	NTS
DATE	13.07.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS FOR THE EXCLUSIVE USE OF DART AEROSPACE LTD. IT IS PROHIBITED THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



D4148-041 FWD X-TUBE LUG ASSY

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[initials]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[initials]</i>	D4148	SHEET 2 OF 5
APPROVED	<i>[initials]</i>	TITLE	SCALE
DE APPR.	<i>[initials]</i>	FWD X-TUBE LUG ASSY	NTS
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D4148-1 FWD X-TUBE LUG PLATE

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET ANNEALED 2B FINISH,
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240
REF DART SPEC M304S11GA OR M303S11GA

2) FINISH: NONE

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

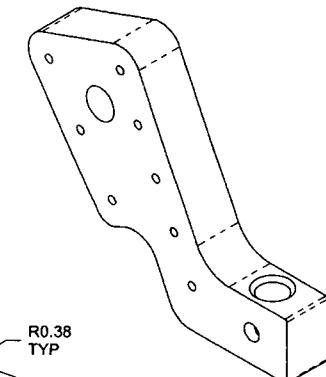
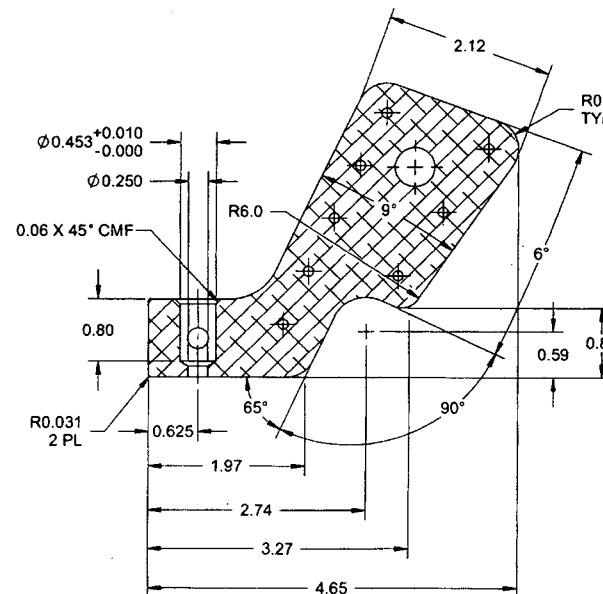
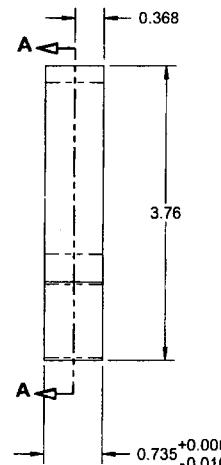
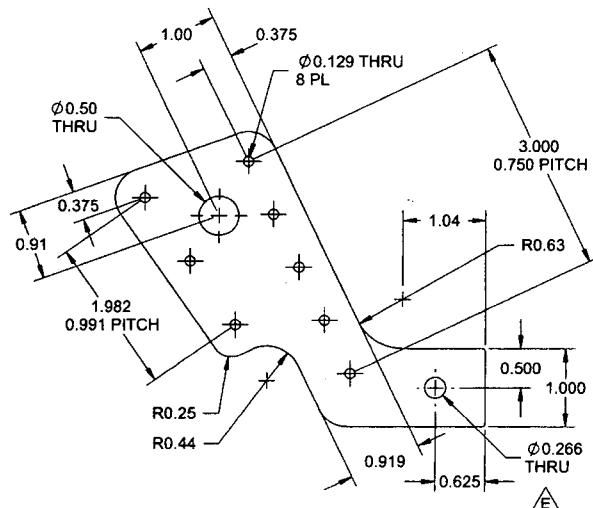
5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 0.52 lbs

DESIGN	MB	DART AEROSPACE LTD		
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E	
MFG. APPR.	<i>[Signature]</i>	D4148	SHEET 3 OF	
APPROVED	<i>[Signature]</i>	TITLE	SCALE	
DE APPR.	<i>[Signature]</i>	FWD X-TUBE LUG ASSY	NTS	
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8 7 6 5 4 3 2 1



D4148-3 STUD RECEIVER LOWER

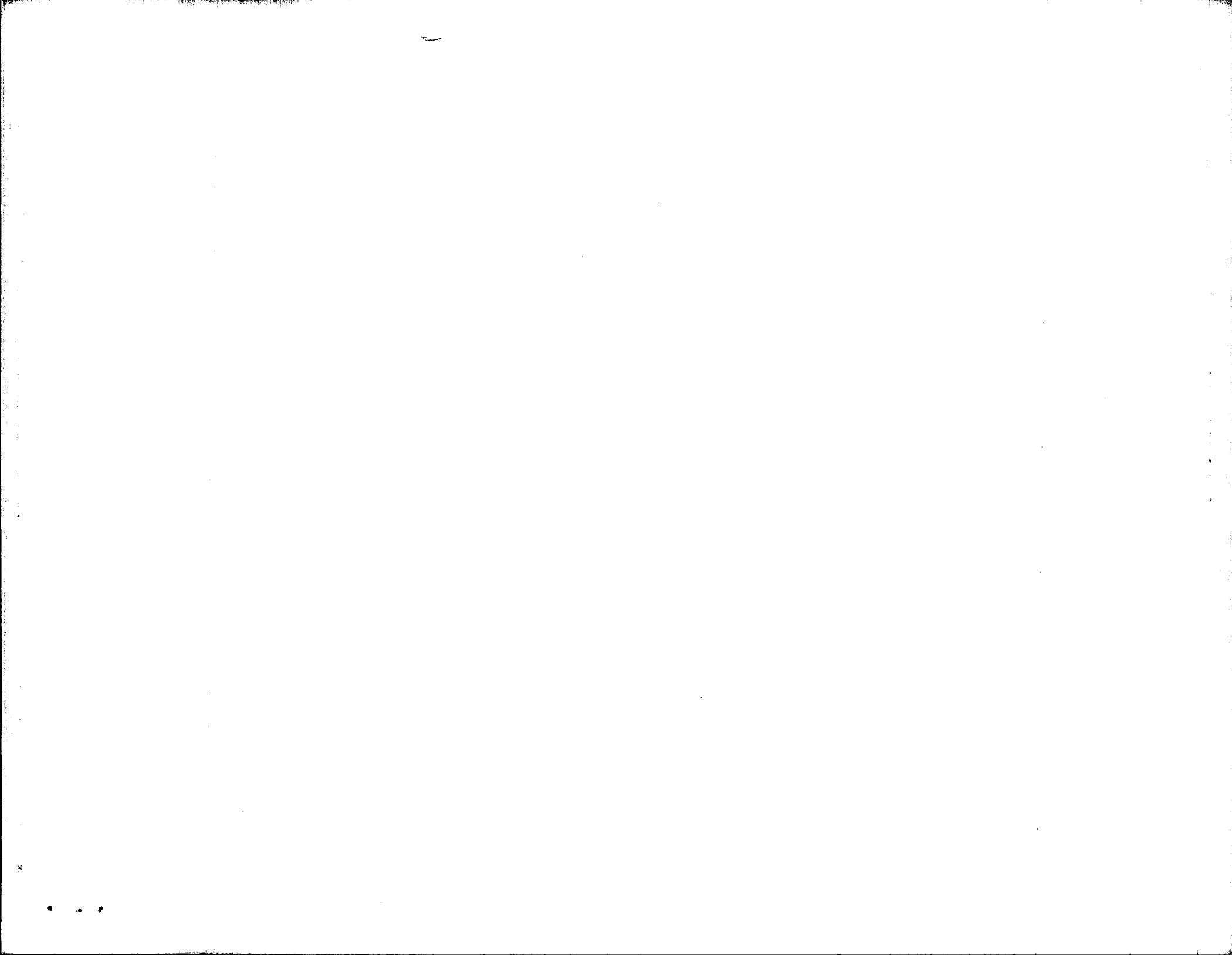
SECTION A-A

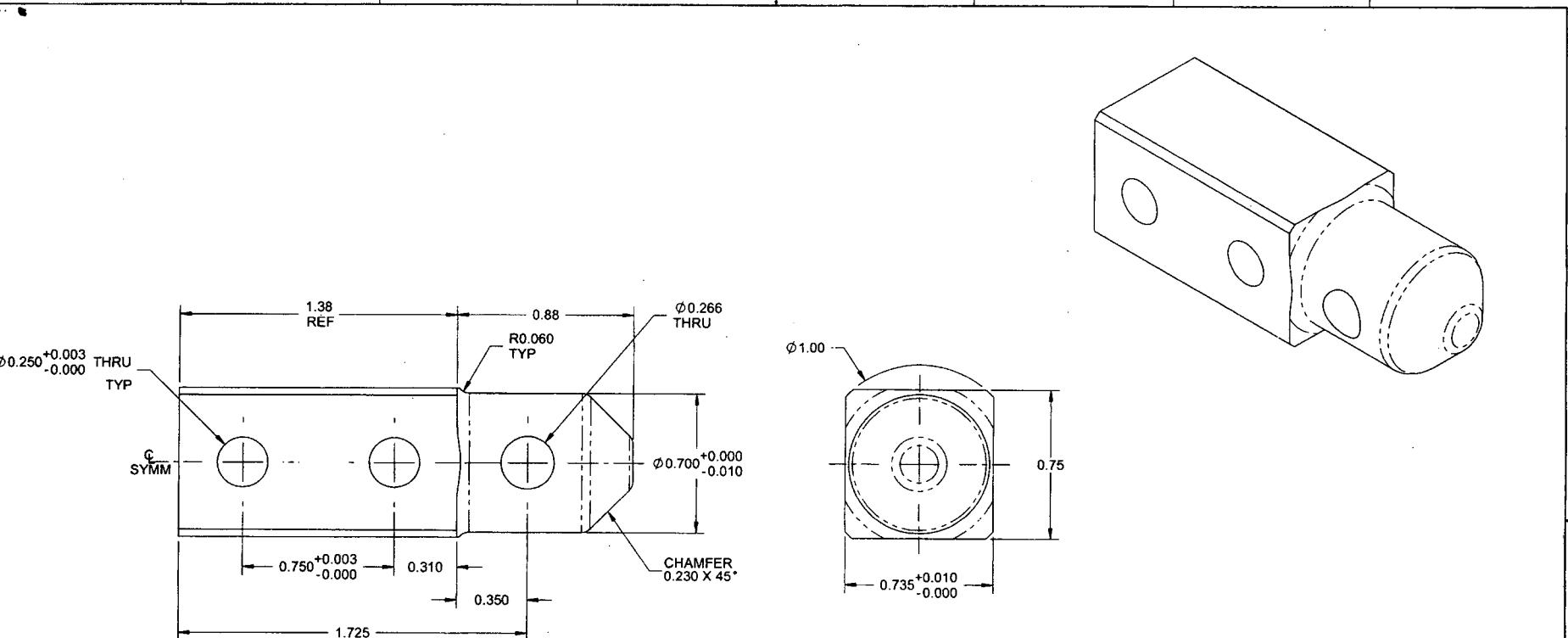
RELEASED
2013-08-16
[Signature]

A **NOTES:**

- 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.51 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN	AJS			
CHECKED	<i>[initials]</i>	DRAWING NO.	REV. E	
MFG. APPR.	<i>[initials]</i>	D4148	SHEET 4 OF 5	
APPROVED	<i>[initials]</i>	TITLE	SCALE	
DE APPR.	<i>[initials]</i>	FWD X-TUBE LUG ASSY	NTS	
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D4148-5 EYEBOLT STUD

A
NOTES:
 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
 REF DART SPEC M304B OR M303B
 2) FINISH: NONE
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: 0.27 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>[Signature]</i>	D4148	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FWD X-TUBE LUG ASSY	NTS
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2013-08-16
[Signature]